Note: Four possible answers A, B, C and D to each question are given. The choice which you think is correct, fill that circle in front of that question with Marker or Pen ink in the answer-book. Cutting or filling two or more circles will result in zero mark in that question.

1-1- What should be added to complete the square of $x^4 + 64$:

   (a) $8x^2$ (b) $-8x^2$

   (c) $16x^2$ ✓   (d) $4x^2$

2- Which order pair satisfy the equation $y = 2x$:

   (a) $(1, 2)$ ✓   (b) $(2, 1)$

   (c) $(2, 2)$ (d) $(1, 1)$

3- In a parallelogram, opposite sides are ---- .

   (a) Parallel ✓   (b) Concurrent

   (c) Congruent   (d) None of these

4- The medians of a triangle cut each other in the ratio ---- .

   (a) $4 : 1$ (b) $3 : 1$

   (c) $2 : 1$ ✓   (d) $1 : 1$

5- The right bisectors of the sides of a triangle are ---- .

   (a) Congruent   (b) Concurrent ✓

   (c) Parallel   (d) None of these

6- Imaginary part of $-i(3i + 2)$ is ---- .

   (a) -2 ✓   (b) 2

   (c) 3 (d) -3

7- $\log e = ----$, where $e \approx 2.718$.

   (a) 0 (b) 1

   (c) 0.4343 ✓   (d) ∞

8- Factors of $3x^2 - x - 2$ are ---- .

    (a) $(x + 1)(3x - 2)$ (b) $(x + 1)(3x + 2)$

    (c) $(x - 1)(3x - 2)$ (d) $(x - 1)(3x + 2)$ √

9- Distance between the points $(1, 0)$ and $(0, 1)$ is:

    (a) 0 (b) $\sqrt{2}$ √

    (c) 1 (d) 2

10- Unit of ratio is ---- .

    (a) Second   (b) Meter

    (c) Kilogram   (d) No unit √

11- The symbol used for "line" :

    (a) $\overline{AB}$ (b) $|AB|$

    (c) $\overleftrightarrow{AB}$ √   (d) $\overrightarrow{AB}$

12- Write $\sqrt[7]{x}$ in exponential form:

    (a) $x^{1/7}$ √   (b) x

    (c) x^7 (d) $x^{7/2}$

13- A triangle ---- is the union of a triangle and its interior.

    (a) Region √   (b) Interior

    (c) Exterior   (d) Area

14- $(3 + \sqrt{2})(3 - \sqrt{2})$ is equal to:

    (a) 7 √   (b) -7

    (c) -1 (d) 1

15- $x =$ ---- is a solution of the inequality $-2 < x < \frac{3}{2}$.

    (a) -5 (b) 3

    (c) $\frac{3}{2}$ (d) 0 √